

MIKULA, F.; MYSЛИIVY, M.; MUR, J.

Diffuse metachromatic Schilder-Foix leukoencephalopathy.
Cas. lek. cesk. 95 no.28-29:759-763 13 July 56.

1. Neurologicka klinika PY v Olomouci, predn. prof. MUDr.
J. Hrbek Ustav pathologicke anatomie PU v Olomouci, predn.
doc. MUDr. C. Dovracek. J. M., pathologickanatomicky ustav
PU, Olomouc.

(ENCEPHALITIS, PERIAXIALIS, case reports
(Cz))

SVOBODA, E.; DUBANSKY, B.; MYSLIVY, M.

Muscular changes in hypofunction of thyroid gland. Ces.lek.cesk.
95 no.33-34:912-917 24 Aug 56.

1. Neurol. klin. Palackeho univ. v Olomouci. Prof. MUDr
Jar.Hrbek. M.S.neurol. klin. PU, Olomouc

(MYXEDEMA, manifest.

muscular (Cs))

(MUSCLES, in various dis.

myxedema (Cs))

MYSLIVY, Milan; KLAUS, Edmund

~~Congenital extradural cyst of the spinal cord. Cesk. rentg. 11 no. 4:
234-238 Dec 57.~~

1. Neuologicka klinika PU v Olomouci, prednosta prof. Jaromir Hrbek.
(SPINAL CORD, cysts
congen. extradural, x-ray diag. (Cz))

MESLIVY, M.

Neurological manifestations in diabetes mellitus; review. Cesk. neur.
22 no.1:68-74 Feb 59.

1. Neurologicka klinika FU v Olomouci, prednosta prof. Dr. J. Hrbek.
(NERVOUS SYSTEM, dis.
caused by diabetes mellitus, review (Cz))
(DIABETES MELLITUS, compl.
MS dis., review (Cz))

ROZOWSKI, Tadeusz ; MYSIWICZ, Henryka.

Tularemia of the cervical lymph nodes erroneously diagnosed as tuberculosis. Gruslica 23 no.10:733-738 Oct 55.

1. Z Kliniki Chorob Zakaznych Pomorskiej A.M. w Szczecinie.
Kierownik: zast. prof. dr. T.Rozowski. Szczecin, ul. Noakowskiego
20 m.8.

(TUBERCULOSIS, LYMPH NODES, differential diagnosis,
tularemia of cervical nodes)

(TULAREMIA,

lymph nodes, cervical, simulating tuberc.)

(LYMPH NODES, diseases,

tularemia of cervical nodes, simulating tuberc.)

MYSIWIEC, J.

MYSIWIEC, J. Pouring asphalt into molds and concrete troughs. p.70
New petroleum fields in Rumania. p.7]

Vol. 10, no. 3, Mar. 1954

NAFTA

TECHNICOY

Krakow, Poland

So: East Europeon Accession, Vol. 5, no. 5, May 1956

KNOCH, L.; MYSLIWIEC, J.

Technical analysis method of harmonic oscillations generated
on a tunnel diode. Archiw elektrotech 13 no.3:651-660 '64.

I. Department of Radio Transmission Engineering of the Technical
University, Gdańsk.

L 17920-65 EWT(1)/EWO(k)/EEC(k)-2/T/EEC(b)-2/EWA(h) Pm-4/Pz-6/Peb IJP(c)/
ASD(a)-5/RAEM(c)/RAEM(a)/ESD(dp)/ESD(c)/ESD(t) P/0019/64/013/003/0651/~~0060~~

ACCESSION NR: AP4049591

AUTHOR: Knecz, L.; Mysliwiec, J.

TITLE: Technical method of analysis of the harmonic oscillations generated by
a tunnel diode 25

SOURCE: Archiwum elektrotechniki, v. 13, no. 3, 1964, 651-660

TOPIC TAGS: tunnel diode, tunnel diode oscillator, Groszkowski method, tunnel
diode oscillator analysis, nonsymmetric negative resistance

ABSTRACT: An analysis of the tunnel-diode oscillator is carried out by the
Groszkowski method in order to show the applicability of the method to nonsym-
metric characteristics. The diode's static characteristic, in the section cor-
responding to negative resistance, is interpolated by the following third degree
polynomial $i = a_1u + a_2u^2 + a_3u^3$. The amplitude values of the voltage at funda-
mental frequency, as well as the contents of the second and third harmonic as
derived by the Groszkowski method, show an average accuracy of 10% as compared
with the values obtained in the laboratory system. Orig. art. has: 23 formulas,
4 figures, and 4 tables.

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L 17920-65
ACCESSION NR: AP4049591

ASSOCIATION: Katedra Radiotechniki Nadawczej Politechniki Gdanskiej (Department of Radio Transmission Engineering, Gdansk Polytechnic Institute)

SUBMITTED: 03Jan64 ENCL: 00 SUB CODE: EC

NO REF SOV: 000 OTHER: 008

Card 2/2

MYSLIWIEC, Jerzy, mgr inż.

Development prospects of mobile radiocommunication in the 300 MHz band. Przegl telekom 37 no.1:1-5 Ja '65.

1. Development Office of the Maritime Radio Service for Ships, Gdynia.

MYSŁIWIEC, M.

3766

621.701.75 : 629.12

Mysliwiec M. Pores In Ship Welds Made by the Shielded Arc Process.
"Pory w spoinach okrętowych wykonanych automatami łukiem kry-

nym". Technika i Gospodarka Morska. No. 11, 1954, pp. 333-336, 3 figs.

Difficulty of correct preparation of edges of welded materials in
uncovered shipyards. Origin of formation of porosity observed in prac-
tice. Two theories interpreting the process of formation of pores in
weld. Measures preventing the formation of porosity. Description of
mechanical cleaning operations of welded edges. Directions for storing

flux material. The proper selection of electrode wire and flux with in-
creased content of CaF₂, SiO₂, MnO and MgO. The use of thin electrodes.

MG

15/3LIM(1), 1.

For the present evaluation of the quality of welding by high voltage C.T.

PZ. PLAK SPRAWAŁNIOWA. (Stowarzyszenie Inżynierów i Techników Mechaników i Elektryków i Instytut Spawalnictwa) Warszawa, Poland. Vol. III, no. 10/91, Oct. "W. 1".

Monthly List of Fast European Inventions (PPI) Lc, Vol. 1, no. 1, Dec. 1971.

Inclu.

P/036/61/000/012/001/002
D002/D101

AUTHOR: Mysliwiec, Mieczysław, Doctor of Engineering (Gdansk)

TITLE: Radiographical quality analysis of weld joints in ship hulls

PERIODICAL: Przeglad spawalnictwa, no. 12, 1961, 309-311

TEXT: The article is the second in a serial which started under the title "Krusze pękanie spawanych statków morskich a jakość połączeń spawanych" (Brittle fractures in welded seagoing ships and the quality of weld joints) in issue no. 10, 1961 of the same periodical. A population of 30,000 radiographs of ship welds compiled at two Polish shipyards was statistically processed in an attempt to work out specifications for statistical quality inspection of ship welds. The criteria of weld quality assessment rest on statistical research made by K. Rühl (Ref. 1: Stand der Sprödbruchfrage mit Berücksichtigung der Stahlnormung [Current knowledge of brittle fractures with consideration of steel standardization]). The radiographs were inspected in terms of three quality levels as outlined by Soviet welding specifications (Ref. 3: Marine Register of the USSR: Pravila primeneniya svarki v suda-stroyenii i sudoremonte, 1955 [Rules of welding application in shipbuilding and

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Radiographical quality

P/036/61/000/012/001/002
D002/D101

ship repair]) and classified on an accept-reject basis. The reject quotient established in an inspection by attributes was

$$0.13 \leq z = \frac{n_{zz}}{n_p} \leq 0.33$$

where n_{zz} is the number of rejected radiographs (\bar{A}) and n_p the total of radiographs taken ($A + \bar{A}$). In an inspection by variables and in normal (Gaussian) distribution, the following system of quality assessment was affirmed:

$$z_b < \bar{z}_b - \sigma \text{ good quality}$$

$$z_b - \sigma \leq z_b \leq \bar{z}_b + \sigma \text{ sufficient quality}$$

$$z_b > \bar{z}_b + \sigma \text{ reject quality}$$

where \bar{z}_b stands for the population mean and σ standard deviation in the Gaussian distribution equation. As the tolerance ε must be accounted for, the actual value of the reject quotient p_0 will be within the range

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P/036/61/000/C12/001/002

D002/D101

Radiographical quality

$$z_b - \epsilon \leq p_0 \leq z_b + \epsilon.$$

An upper range limit of $\bar{z}_b + \delta = 0.293$ and a tolerance of $\epsilon = 0.04$ will ensure that no ship will be accepted with a quotient z_b higher than 0.333. The condition is deemed sufficient on the grounds that there are ships in operation with a quotient of $z_b = 0.33$. The article will be continued. There are 3 figures, 3 tables and 5 Soviet-bloc references.

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Card 3/3

MYSLIWOEC, Mieczyslaw, dr., inz. (Gdansk)

Brittle fracture of welded ship hulls and the quality of welds.
Przegl spaw 13 no.10:258-260 '61.

1. Czlonek Komitetu Redakcyjnego miesiecznika "Przeglad Spawalnictwa".

37778
P/036/62/000/005/001/001
D001/D101

17300

AUTHOR: Mysliwiec, Mieczysław, Doctor of Engineering (Gdańsk)

TITLE: Investigation on the effect of the cooling rate in a joint transition zone on the aptitude to brittle fracture in ship hulls welded from low-carbon steel

PERIODICAL: Przegląd spawalnictwa, no. 5, 1962, 125-131

TEXT: The article is an abridgement of a report first published in the January 1962 issue of the Biuletyn informacyjno-techniczny Spawalniczego ośrodka doświadczalnego Stoczni Gdańskiej (Technical Information Bulletin of the Gdańsk Shipyard's Experimental Welding Center). The author investigated the effect of cooling rate in welded joints on their aptitude to brittle fracture under static stress and attempted determination of the mean stress coefficient for joints in medium-sized ship hulls built of low-carbon steel. The author employed the methods of T. Pełczyński (Ref. 3): Wpływ stanu napięcia na przejście materiału w stan plastyczny /The effect

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Investigation on the effect of ...

P/036/62/000/005/001/001
D001/D101

of stress on the transition into plastic state⁷, Przegląd mechaniczny, no. 6 and 7, 1951; Ref. 4: Nowa koncepcja wyznaczania temperatury kruchosci na zimno stali konstrukcyjnej [New concept of determining the temperature of cold shortness of structural steel], Przegląd spawalnictwa, no. 4, 1959) to determine the aptitude of steel to brittle fracture, and the theory of N.N. Rykalin (Ref. 5: Raschety teplovykh protsessov pri svarke [Calculation of thermal processes in welding], Mashgiz, 1951) on heat dissipation in metals during the welding process. He ascertained that for P5 steel, the temperature of transition T_k into brittle state lies between -40 and -38°C , when established for 100% crystalline fracture and when fulfilling the equations $\bar{z}_p = -0.0443 T + 1.84$ (9) and $f/F = z_p \cdot 0.36$ (10), where z_p -- monthly index of fracture frequency, T -- ambient temperature, f -- cross sections of longitudinal fractures, and F -- cross section sum of longitudinal joints. Solution of the relationship $r = f(T, w)$ (11), where r -- coefficient of material resistance against squeeze, T -- temperature, w -- instantaneous cooling rate, and determination of T_k -- temperature of

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D001/D101

Investigation on the effect of ...

transition into brittle state, makes possible determination of the stress coefficient in welded hulls. The mean coefficient \bar{z} was calculated to be between 0.308 and 0.404. Conclusions: (1) The average temperature of transition into brittleness for joints in ship hulls built of P5 steel is $T_k = -38^{\circ}\text{C}$. It can be determined by static bending of stellite-surfaced samples. (2) The method of T_k determination is expected to permit classification of steels by their resistance to brittle fracture in the process of supply. (3) A correlation was established between resistance to squeeze of P5 steel, ambient temperature, and cooling rate of welded joints. (4) The variability range of the stress coefficient \bar{z} for welded joints was established. It may help determine whether steel of higher strength is usable for welded ship hulls. There are 14 figures and 1 table.

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X

MYSЛИWIEC, Mieczyslaw, dr., ins. (Gdansk)

Extent of radiographic control of welded joints in ship hulls.
Przegl spaw 14 no.1:13-16 '62.



MYSLIWIEC, Mieczyslaw, dr., inz. (Gdansk)

Influence of the weld length of ship hull on the minimum range of radiographic control. Przegl spaw 14 no. 3:75-78 March '62.

1. Członek Komitetu Redakcyjnego miesięcznika "Przeglad Spawalnictwa"

MYSŁIWIEC, Mieczysław, doc. hab. dr inż.

Technological strength of weldings in ship hulls based on a
new testing method. Przegl spaw 16 no. 3: 63-68 Mr '64.

1. Politechnika, Gdańsk.

L 30056-66 EWP(w)/EWP(c)/EWP(v)/T/EWP(t)/ETI/EWP(k)/EWP(l) IJP(c) JD/WB
ACC NR: AP6007343 (N) SOURCE CODE: PO/0036/65/000/010/0233/0239

AUTHOR: Mysliwiec, Mieczyslaw (Docent, Dr. Engineer)

ORG: Danzig Polytechnical Institute (Politechnika Gdanska)

TITLE: The technical strength of welded seams of ships' hulls

SOURCE: Przeglad spawalnictwa, no. 10, 1965, 233-239

TOPIC TAGS: welding, weld defect, weld evaluation, welding electrode, welding inspection, seam welding

ABSTRACT: The article discusses data on the x-rays of welded seams of ships' hulls which show, that of the overall number of x-rays showing weld defects, x-rays showing flaws, fissures or cracks may constitute from 0 to 11%, and reports on a study of statistical material with a view to a more profound analysis of this problem. This study makes it possible to localize fissures in order to investigate their connection with the state of stress of the weld and with ambient temperature prevailing at the time the welded structures are made. The fundamentals of the theory of the technical strength of metals are discussed as well as methods of testing technical strength, and the results of comparative investigations carried out by the Evans and Christensen method and by the method of model tests are given. Conclusions concerning the effect of using certain types of welding electrodes on weld strength are drawn. It has been

36
35
B

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L 30056-66

ACC NR: AP6007343

found, that technical strength cannot be estimated on the basis of metalographic or drop tests. Test results and recommendations are given. Orig. art. has: 13 figures, 10 tables and 3 formulas.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 003/ Sov REF: 001/ OTH REF: 001

Card 2/2 10

MYSLINSKI, A.; MICHALIK, T.

Nucleic acids, glycogen and lipides during the embryonic development of the vibrissae in white rats. Folia morphol 22 no.1:59-66 '63.

1. Zaklad Histologii i Embryologii, Akademia Medyczna, Gdansk.
Kierownik: prof. dr S.Hiller.

*

CZEWZYK, Teresa; MICHAIEK, T.; MYSLIWSKI, A.; SMIECHOWSKA, Barbara

Studies of certain histochemical reactions in brain blood
vessels of human foetuses. Folia histochem. cytochem. Krakow,
3 no.2:149-160 '65.

1. Department of Histology and Embryology, Medical Academy,
Gdansk.

L 55918-65

ACCESSION NR: AP5018504

UR/0020/64/159/003/0690/0692

AUTHOR: Myslobodskiy, M. S.

TITLE: Type of primary reaction to light in the ontogenesis of rabbits irradiated in various periods of antenatal development

SOURCE: AN SSSR. Doklady, v. 159, no. 3, 1964, 690-692

TOPIC TAGS: experiment animal, encephalology, x ray irradiation, cerebral cortex, biological reproduction

Abstract: On irradiation of rabbits with x-rays in a dose of 400 r on the 15th or 23rd day of antenatal development, their response to light during the first 7 days after birth was determined by measuring the bioelectric reaction of the cerebral cortex. The amplitude of the positive wave of the primary response; following opening of the eyes by the newborn rabbits, was higher and developed more rapidly in rabbits irradiated on the 15th day of embryogenesis as compared with rabbits irradiated on the 23rd day. The response to light was lower for rabbits irradiated in the late stage of embryogenesis, because the cerebral cortex was damaged primarily on irradiation in this stage, while in rabbits irradiated on the 15th day of antenatal development the damage was principally to the reticular formation.

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8
B

L 55948-65

ACCESSION NR: AP5018504

Orig. art. has 2 figures and 1 graph.

ASSOCIATION: Institut vysshoy nervnoy deyatel'nosti i nevrofiziologii Akademii nauk SSSR (Institute of Higher Nervous Activity and Neurophysiology, Academy of Sciences SSSR)

SUBMITTED: 06Apr64

ENCL: CC

SUB CODE: LS

NO REF Sov: 009

OTHER: 005

JPRS

Card 2/2

MPA

IVANITSKIY, A.M.; MYSLOBODSKIY, M.S.

Secondary response of the visual cortex in rabbits. Zhur. vys. nerv. deiat. 15 no.5:287-294 S-O '65. (MIRA 12:11)

1. TSentral'nyy nauchno-issledovatel'skiy institut sudebnoy psichiatrii im. Serbskogo i Institut vysshey nervnoy deyatel'nosti i nevrofiziclogii AN SSSR, Moskva.

L 27603-66

ACC NR: AP6018402

SOURCE CODE: UR/0020/65/162/001/0229/0231

30
8

AUTHOR: Picentkovskiy, I. A.; Myslobodskiy, N. S.

ORG: Institute of Higher Nervous Activity and Neurophysiology AN SSSR (Institut vysshey nervnoy i myashch'noy nevropatologii AN SSSR)

TITLE: Significance of photostimulation of the peripheral end of the visual analyzer in the maturing of its cortical representation

SOURCE: AN SSSR. Doklady, v. 162, no. 1, 1965, 229-231

TOPIC TAGS: neurophysiology, cerebral cortex, vision, bioelectric phenomenon

ABSTRACT: The authors set out to determine whether peripheral visual and cortical functions mature simultaneously, although independently, or whether the gaining of sight, the activation of visual reception, is a stimulating factor in the development of its cortical representation. The origin and evolution of evoked potentials was studied in postnatal development of intact young rabbits and in animals whose eyes were artificially opened by dissecting the palpebral membranes. It was found that premature activation of the visual apparatus has no effect on the rate of development of the visual cortex, even though light flashes evoked bioelectric activity at the end of the first week of life of the rabbits. The development of the visual cortex at this stage, when the eyes are still closed, occur more or less independently or as part of several already functioning

Cont. 1/2

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L 27603 66

ACC NR: AF6018602

systems responsible for its maturation. Consequently, involution arriving prematurely from the visual receptor cannot change these functional relations which develop conservatively in the course of evolution nor can they significantly affect the development of the visual cortex. This paper was presented by Academician V. N. Chernigovskiy on 3 July 1964. Orig. art. has: 2 figures and 1 table. [JPG]

SUB CODE: 06 / SUM DATE: 21Jun64 / ORIG REF: 004

Card 2/2 C.C.

CHERTKOV, B.A.; VASIL'YEV, B.T.; REPENKOVA, T.G.; BOGUSLAVSKAYA, R.I.; DOBRO-
MYSLOVA, N.S.

Obtaining 100 per cent sulfur dioxide for the production of sodium
hydrosulfite. Khim.prom. no.1:49-52 Ja '64. (MIRA 17:2)

ZALKIND, M.S.; 7 LOB

Internal conference indicated to the members of the delegation of U.N. Secretary General's delegation that the Chinese side had been fully satisfied with the results.

MYSLOBODSKIY, M.S.

Nature of the primary response to light in the ontogeny of
rabbits irradiated at various stages of their antenatal development.
Dokl. AN SSSR 159 no. 3:690-692 N '64 (MIRA 18:1)

1. Institut vysshey nervnoy deyatel'nosti i nevrofiziologii
AN SSSR. Predstavлено академиком V.N. Chernigovskim.

MYSLOVSKIY, Yu.A. (Kamanets-Podol'sk)

Late consequences of gunshot wounds of the lungs. Vrach. delo no.9:
97-100 S '61. (MIRA 14:12)

1. Nauchnyy rukovoditel' - zav. kafedroy rentgenologii i radiologii
Kiyevskogo meditsinskogo instituta dotsent N.F.Zarkovich.
(LUNGS--WOUNDS AND INJURIES)

MYSŁOWSKI, F.

Lack of care for the village cooperative is lack of care for the peasant, p. 5.
(ROLNIK SPÓŁDZIELCA, Warszawa, Vol. 8, no. 9, Feb. 1955.)

SO: Monthly List of East European accessions, (EEAL), LC, Vol. 4, No. 6, Jan. 1955,
Uncl.

WYSŁOWSKI, M.

"Future of the Wisla Bay." p. 184 (GOSPODARKA WODNA, Vol. 13, No. 5, May 1953) Warszawa

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 10.
October 1953. Unclassified.

MYSŁCWSKI, M.

Glacial observations in the Gulf of Danzig in the winter of 1954/55.

P. 281., Vol 2, no 4, 1955 ARCHIWUM HYDROTECHNIKI Warszawa

SOURCE: East European Accessions, (EHAL), LC, Vol 5, No. 3, March 1956

~~Mieczyslaw [Myslowski, Mieczyslaw]~~

Committee on the Study of the Sea of the Polish Academy of
Sciences. Okeanologia 3 no.3:558-559 '63. (MIRA 16:8)
(Poland—Oceanographic research)

NYSTOMSKI, Z.

Roztoczejew's Islam.

p. 8 (Lwzce, Vol. 12, no. 2, Fev. 1958). Warsaw, Poland)

Monthly Index of East European Accessions (MIEA) Vol. 7, no. 2,
February 1958

MYSLOWSKI-MYCKA, Andrzej

Reticulosarcoleukemia. Polaki tygod. lek. 14 no.24: 1104-1106
15 June 59

1. (Z II Kliniki Chorob Wewnętrznych U.M.C.S. w Lublinie; kierownik:
prof. med. Jakub Wegierko oraz z Oddziału Wewnętrznego Szpitala MSW
w Lublinie; ordynator. dr med. Andrzej Mysłowski-Mycka).
(SARCOMA RETICULUM CELL) (LEUKEMIA)

KUNIN, V.N., kand.fiz.-matem.nauk; MYSLYAYEV, V.M.

Laboratory bench for engine testing. Avt. prom. no. 5:27-28 My '60.
(MIRA 14:3)

1. Chelyabinskij institut mekhanizatsii i eletrifikatsii sel'skogo
khozyaystva (ChIMSEKh).
(Automobiles—Engines—Testing)

MYSLYAYEVA, A.

"Data on the Pathology of Various Forms of Botkin's Disease." Cand Med Sci,
Kazakh Medical Inst, Alma-Ata. 1954. (RZhBiol, No 7, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations
Defended at USSR Higher Educational Institutions (16).

'MYSLYAYEVA, A. V.

Thymol test; determination method and clinical value. Lab.delo
no. 3:12-14 My-Je '55. (MLRA 8:8)

1. Iz kafedry propedevticheskoy terapii (zav.-prof. M.A. Brenev)
Kazakhskogo meditsinskogo instituta imeni V.M. Molotova.
(LIVER FUNCTION TESTS,
- thymol turbidity test)

NYSLYAYEVA, A.V., kand. med. nauk; ZAKHVTAKINA, I.A.; SVERDLOV, S.L.; ANDREYEV, I.D., dotsent; GENADINNIK, I.S., kand. med. nauk; KUZNETSOV, A.A., NIKOLAYEVA, G.V., prof.; SILAKOVA, V.V., dotsent; SHAMLYAN, N.P.; FRIDMAN, M.I., dotsent; GORBYLEV, M.N.; SIGAL, Ye.S., zasluzhennyj vrach RSFSR; KHLOPOPOVA, L.N.; GABOV, A.A.; LILEYEV, V.A.; MAKAREVICH, Ya.A., kand. med. nauk; SHELEPIN, A.S.; SMELEV, M.M.; PEVZNER, G.I.; SILAYEV, Yu.S.

Abstracts. Sovet. med. 27 no.6:140-145 Je'63 (MIRA 17:2)

1. Iz kafedry propedevtiki ~~vnutrennikh~~ bolezney i patologicheskoy anatomi Kazakhskogo meditsinskogo instituta (for Myslyayeva, Zakhvatkina).
2. Iz Novozybkovskoy mezhrayonnoy bol'nitsy Bryanskoy oblasti (for. Sverdlov).
3. Iz kafedry normal'noy anatomi II Moskovskogo meditsinskogo instituta (for Andreyev).
4. Iz kafedry obshchey khirurgii i kafedry rentgenologii Chelyabinskogo meditsinskogo instituta (for Genadinnik, Kuznetsov).
5. Iz kafedry propedevticheskoy terapii Ivanovskogo meditsinskogo instituta (for Nikolayeva, Silakova).
6. Iz Lovozereskoy rayonnoy bol'nitsy Murmanskoj oblasti (for Shamlyan).
7. Iz kafedry hospital'noy terapii Bashkir'skogo meditsinskogo instituta i terapeuticheskogo otdeleniya ~~8~~ bol'nitsy (for

(Continued on next card)

ZABRODIN, D.M., kand.istorich.nauk; KALYUZHNAIA, N.K.; MAYSTRENKO, L.F.;
MYSNICHENKO, V.P.; PAKHNIN, Ye.I.; SHAPOVAL, A.P.; VASHCHENKO, G.I., red.;
KAMINSKIY, L.N., red.; LIMANOVA, M.I., tekhn.red (MIRA 16:6)

[Work and live the communist way, 1958-1962] Rabotat' i zhit' po
kommuunisticcheski; 1958-1962. Sbornik dokumentov i materialov.
Khar'kov, Khar'kovskoe knishnoe izd-vo, 1963. 250 p.
(MIRA 16:6)

1. Kommuunistichekskaya partiya Ukrayiny. Khar'kovskiy
oblastnoy komitet. Partiyny arkhiv.
(Kharkov--Efficiency, Industrial)

MYSNIK, Yu.F.; RYBACHEK, Ye.P.

Age of the small intrusives of the Godoisk complex and the
gold-molybdenum ore deposits related to them.(eastern Lake Baikal
region). Dokl.AN SSSR 144 no.2:424-426 My '62. (MIRA 15:5)

1. L'vovskiy gosudarstvennyy universitet im. Ivana Franko.
Predstavleno akademikom V.S.Sobolevym.
(Baikal Lake region—Rocks, Igneous)
(Baikal Lake region—Ore deposits)
(Geological time)

C MYSONA, Mieczyslaw

Turbidimetric determination of acetone in wood spirit
Antoni Weli and Mieczyslaw Mysona (Acad. Committee,
Cracow). Przeglad Chem. 3, 51-52 (1947). Shake 30 cc
of test soln. with 30 cc. KI soln. (4 g. I, 20 g. KI in one
l. H₂O) and 30 cc. 0.5 N NaOH and allow to stand 8
min. Use a photoelectric colorimeter for detg. acetone as
CH₃. Its concn. should not exceed 0.01%.

ABE-SEA METALLURGICAL LITERATURE CLASSIFICATION

CA

27

The influence of rosin on the sudsing of soap. M.
Myerna and K. Rytko. *Przemysl Chemiczny*, 6(29), 234-61
(1931).—Rosin makes soap more sol. in H₂O and decreases
the amt. of suds formed. It is more effective in tallow soaps
than in coconut-oil soaps.

MYSZIA, M.

Research on the acid resistance of enameled utensils according to the
standardized method; critical remarks on standard PN-51/M-77161. p. 11.

SZKŁO I CERAMIKA. (Centralne Zarządy Przemysłu Skłarkiego i Ceramicznego oraz
Stowarzyszenie Naukowo-Techniczne Inżynierów i Techników Przemysłu Ceramicznego)
Warszawa, Poland.
Vol. 10, no. 4, Apr. 1959.

Monthly list of East European acquisitions (EWA) 12, Vol. 1, no. 7, copy 1.

Uncl.

MYSONA, Mieczyslaw; NALEPA, Wieslaw; GAZDZINSKA, Jadwiga

Obtaining of enamels on aluminum sheets. Szkoła 12 no.8:243-247
Ag '61.

1. Katedra Towaroznawstwa, Wyższa Szkoła Ekonomiczna, Krakow.

MYSONA, Mieczyslaw; KUNCEWICZ, Leszek; BOROWIEC, Marian

Effect of sterilization on the quality changes of rubber seals of medicinal drugs. Farmacja Pol 19 no.7:121-124 10 Ap '63.

1. Katedra Towaroznawstwa, Wyzsza szkola Ekonomiczna, Krakow.

AUTHORS: Knunyants, I. L., Mysov, Ye. I.,
Krasuskaya, M. P. SOV/62-58-7-24/26

TITLE: The Catalytic Hydration of the φ -Olefines (Kataliticheskoye
gidrirovaniye φ -olefinov)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk,
1958, Nr 7, pp 906 - 907 (USSR)

ABSTRACT: The investigation of the catalytic hydration of the φ -olefines
besides its practical importance is also interesting because
it is directly connected with important problems concerning the
theory of heterogeneous catalysis. The rate of hydration depends
on the state of the π -bond of the olefines. It increases with
the decrease of the electron density of the bond, if the removal
of the electrons from the catalyst lattice by the olefine
molecule is the primary phenomenon in this process. The authors
of the present paper showed that φ -ethylene, φ -propylene, φ -
isobutylene, and other φ -olefines may be easily hydrated with
molecular hydrogen on a palladium and nickel catalyst. The
enclosed table gives the formulae of the initial olefine, the
name of the catalyst, the hydration temperatures, the hydration

Card 1/2

The Catalytic Hydration of the φ -Olefines

SOV/62-58-7-24/26

products etc. Based on the observations made it may be assumed with great probability that the property of easy hydration of the olefine series increases from α -ethylene to φ -isobutylene. There are 1 table and 7 non-Soviet references.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR
(Institute of Elemental-organic Compounds, AS USSR)

SUBMITTED: May 12, 1958

Card 2/2

82692

53600

S/062/60/000/008/006/012
B004/B054

AUTHORS: Knunyants, I. L., Krasuskaya, M. P., and Mysov, Ye. I.

TITLE: Reactions of Fluoro Olefins. 13 Catalytic Hydrogenation ⁷ of Perfluoro Olefins ¹

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk. 1960, No. 8, pp 1412-1418

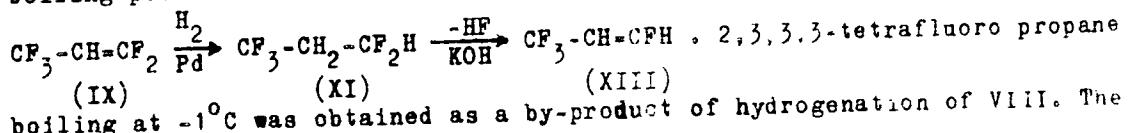
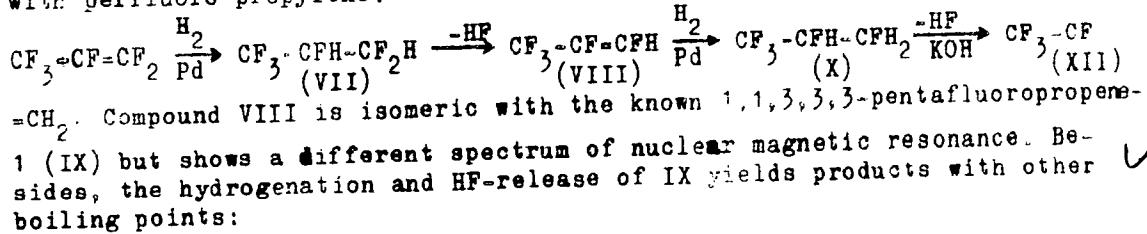
TEXT: In previous papers (Refs 3, 4) the authors had been dealing with the hydrogenation of fluoro olefins, which easily proceeds on a palladium- or nickel catalyst. In the present paper they report on the hydrogenation of tetrafluoro- and trifluoro ethylene as well as on the fact that the products of hydrogenation of some hydrocarbon fluorides easily split off hydrogen fluoride under the action of alkali; here, fluoro olefins are formed which cannot, or can only with great difficulty, be produced by means of the usual methods of halogenation. In this connection, the authors give the following reaction chains: Perfluoro isobutylene is hydrogenated to 1,1,3,3,3-pentafluoro-2-trifluoromethyl propane (I), which in aqueous alkali solution easily yields HF, and forms 1,3,3-tetrafluoro-2-trifluoro-methylpropene-1 (II) the structure of which was established by oxidation. Card 1/3 X

82692

Reactions of Fluoro Olefins. 13. Catalytic
Hydrogenation of Perfluoro Olefins

S/062/60/000/008/006/012
B004/B054

to hexafluoro acetone. Hydrogenation of (II) yielded 1,3,3,3-tetrafluoro-2-trifluoromethyl propane (III). Hexafluoro isobutylene (IV) resulted therefrom by giving off HF. Hydrogenation of (IV) produced 3,3,3-trifluoro-2-trifluoromethyl propane (V), and from the latter 1,1,3,3,3-pentafluoro-2-methylpropene-1 (VI) was obtained by passing it through 90% molten KOH at 170°C. The authors performed a similar successive series of reactions with perfluoro propylene:



Card 2/3

Reactions of Fluoro Olefins. 13. Catalytic
Hydrogenation of Perfluoro Olefins

82692

S/062/60/000/008/006/012
B004/B054

hydrogenation of perfluoro butadiene yielded 1,1,2,3,4,4-hexafluoro butane which, with one mole of HF in 2,3-position splitting off, was transformed to $\text{CF}_2\text{-CF-CH-CH}_2\text{H}$. A table shows the boiling points of the compounds obtained. In the experimental part of the paper, the authors indicate the production of the Pd- and Ni catalyst, and the reactions performed, as well as the physical data and analyses of the compounds obtained. There are 1 table and 16 references: 3 Soviet, 5 US, 6 British, 1 Canadian, and 1 German.

ASSOCIATION: Institut elementoorganicheskikh moyedineniy Akademii nauk
SSSR (Institute of Elemental-organic Compounds of the
Academy of Sciences, USSR)

SUBMITTED: March 3, 1959

Card 3/3

43309

S/062/62/000/012/004/007

B117/B101

53600

AUTHORS: Knunyants, I. L., Krasuskaya, M. P., Mysov, Ye. I. and Mukhtarov, I. A.

TITLE: Reactions of fluoro olefins. Communication 15. Catalytic hydrogenation of perfluoro cyclobutene

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 12, 1962, 2141-2145

TEXT: A Pd catalyst was used for the hydrogenation of perfluoro cyclobutene at room temperature. A mixture containing two isomers of 1,2-dihydroperfluoro cyclobutane was found to form: one (approximately 90%) with a boiling point of 65°C (d_4^{20} 1.5780; n_D^{20} 1.2985) and the other (less than 10%) with a boiling point of 27°C (d_4^{15} 1.5580; n_D^{15} 1.2970). Radio-spectroscopic studies were made to determine the configuration of the isomers separated by distillation. An analysis of the rotational bands in microwave absorption spectra showed the isomer with the higher boiling point to have a cis-configuration and that with the lower boiling point to have a trans-configuration. Dehydrofluorination converted both isomers into

X

Card 1/2

Reactions of fluoro olefins...

S/062/600/012/004/007
B117/B101

1-hydroperfluoro cyclobutene, b.p. 26°C. Oxidation of the latter yielded tetrafluoro succinic acid m.p. 115-120°C. 1,1,2-trihydroperfluoro cyclobutane (83%; b.p. 50-52°C; d_{20}^{20} 1.441; n_D^{20} 1.3025) was obtained by hydrogenating 1-hydroperfluoro cyclobutene on a Pd catalyst. It was then dehydrofluorinated into 1,2-dihydroperfluoro cyclobutene, b.p. 53-40°C, and dibromide, b.p. 117-119°C, and dehydrobromated into 1-bromo-2-hydroperfluoro cyclobutene, b.p. 72-74°C. 1,1,2,2-tetrahydroperfluoro cyclobutane, b.p. 50°C, n_D^{20} 1.3038, was obtained by hydrogenating 1,2-dihydroperfluoro cyclobutene on Pd/ Al_2O_3 , at 60-70°C.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR
(Institute of Elemental Organic Compounds of the Academy of Sciences USSR)

SUBMITTED: April 12, 1962

Card 2/2

CHEBURKOV, Yu.A.; MYSOV, Ye.I.; KNUNYANTS, I.L.

Perfluorodimethylketene and perfluoromethacrylic acid. Report No.3:
Comparison of haloanhydrides of α -halohexafluoroisobutyric acids
in the reaction with zinc. Izv. AN SSSR. Ser.khim. no.9:1570-1572
S '63. (MIRA 16:9)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Ketene) (Propionic acid) (Zinc)

LARIONOV, A.S.; MYSOVSKAYA, Ye.I. (gorod Saratov).

Kucherov reaction in the chemistry course for schools. Khim.v shkole
no.6:41-42 N-D '53. (MLBA 6:11)
(Chemistry, Organic--Study and teaching)

MYSOVSKAYA, Ye. I.

LARIONOV, A.S.; MYSOVSKAYA, Ye.I.; RAKHMATULIN, A.T.(g. Saratov)

Simplest apparatus for demonstrating the cracking of petroleum
products. Khim.v shkole 9 no.5:55-56 S-0 '54. (MIRA 7:9)
(Chemistry--Experiments) (Cracking process)

MYSOVSKAYA, YE I.

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, № 19, 1956, 61530

Author: Larionov, A. S., Mysovskaya, Ye. I.

Institution: None

Title: Molecular Compounds of Secondary Furan Alcohols and Esters of Levulinic Acid with Magnesium Chloride

Original

Periodical: Uch. zap. Saratovsk. gos. ped. in-ta., 1955, № 19, 202-205

Abstract: Study of composition and conditions of formation of molecular compounds of $MgCl_2$ with ethyl-(I) (BP 80-82°/10 mm, n^{20}_D 1.48453, d_4^{20} 1.04518) and isoamylfurylcarbinol (II) (BP 110-112°/6 mm, n^{20}_D 1.4725, d_4^{20} 0.9782), methyl (III) (BP 76-78°/10 mm, d_4^{20} 1.0507), isoamyl (IV) (BP 112-114°/10 mm, d_4^{20} 0.968) and ethyl (V) (BP 88-90°/10 mm, d_4^{20} 1.0201) esters of levulinic acid. It was found that I and III combine with $MgCl_2$ in molecular proportions 1:1, while II, IV and V in a ratio 1:2. Mixture of 1 part $MgCl_2$ and 10 parts I-V in absolute C_6H_6 boiled 1 hour, solid reaction product filtered off, dried between porous plates and analyzed for Cl_2 .

Card 1/1

LARIONOV, A.S., dotsent; MYSOVSKAYA, Ye.I., assistant; KOVALENKO, N.I.,
dotsent

Magnetic rotation of the plane of polarization by simple berneol
esters. Uch. zap. Sar. gos. pedag. inst. no.28:29-34 '57.
(MIRA 11:?)
(Berneol) (Magnetooptics)

AUTHOR:

Mysovskaya, Ye. I.

SOV/156 -58-3-29/52

TITLE:

The Influence of Hydrocarbons on the Optical Activity of the Simple Esters of *l*-borneol (Vliyaniye uglovodorodov na opticheskuyu aktivnost' prostykh estirov *l*-Borneola)

PERIODICAL:

Nauchnyye doklady vysshey shkoly, Khimiya i khimicheskaya tekhnologiya, 1958, Nr 3, pp. 516 - 520 (USSR)

ABSTRACT:

The author carried out experiments to determine the general rules governing the influence of the organic solvent on the optical activity of the simple esters of *l*-borneol. He also gives the results obtained on the change in optical activity of *l*-borneol under the action of benzene, cyclohexane and hexane. In order to completely characterize the systems investigated determinations of the specific weight and of the refractive index were also made. N-hexane, cyclohexane and benzene (used as solvents) influence to a high degree the optical activity of the simple esters of *l*-borneol. According to their effect they can be classified as follows: benzene > cyclohexane > n-hexane. Based on the experimental results the percentage deviation of α from the activity was calculated. The isothermal lines a and the deviation curves of additivity a

Card 1/2

The Influence of Hydrocarbons on the Optical Activity
of the Simple Esters of ℓ -borneol SOV/156-58-3-29/52

for the systems bornyl ester - cyclohexane, ethylbornyl ester -
cyclohexane, ethylbornyl ester-benzene were taken. The systems
methyl- and ethylbornyl ester with n-hexane, cyclohexane and
benzene belong to the systems with associated components. The
molecules of the simple esters of ℓ -borneol investigated are
probably also associated. There are 2 figures, 3 tables, and 15
references, 5 of which are Soviet.

ASSOCIATION:

Kafedra Khimii Saratovskogo pedagogicheskogo in-

stituta (Chair of Chemistry at the Saratov Pedagogic Institute)

SUBMITTED: February 1, 1958

Card 2/2

AUTHOR: Mysovskaya, Ye. I. SOV/156-58-4-31/49

TITLE: The Influence of Oxygen Containing Organic Compounds Upon the Optical Activity of Methyl- and Ethyl-Ester of 1-Borneol
(Vliyaniye kislotno-soderzhashchikh organicheskikh soyedineniy na opticheskuyu aktivnost' metilovogo i etilovogo estirov 1-borneola)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya tekhnologiya, 1958, Nr 4, pp 736-739 (USSR)

ABSTRACT: In the present paper the influence of the polar oxygen containing organic compounds on the optical activity of the simple ester of 1-borneol in solutions of different concentrations was investigated. Ethyl alcohol, acetic acid and acetic anhydride were used as solvents in the investigations. The influence of the above mentioned polar solvent upon the optical activity of the methyl- and ethyl-ester of 1-borneol is higher to the same extent to which the dipole moment of the organic solvent is lower. Organic solvents classified according to their effective strength have the following order: $C_2H_5OH > CH_3COOH > (CH_3CO)_2O$. The shape of the isotherm does not show any special character-

Card 1/2

SOV/156-58-4-31/49

The Influence of Oxygen Containing Organic Compounds Upon the Optical Activity
of Methyl- and Ethyl-Ester of l-Borneol

istic indicating a chemical interaction of the simple ester of
l-borneol with the solvents applied. There are 2 figures,
2 tables, and 5 references, 3 of which are Soviet.

ASSOCIATION: Kafedra khimii Saratovskogo pedagogicheskogo instituta (Chair of
Chemistry at the Saratov Pedagogic Institute)

SUBMITTED: March 14, 1958

Card 2/2

LARIONOV, A.S.; MYSOVSKAYA, Ye.I.

Magnetooptical activity of solutions of α -borneol ethers. Izv.
vys. ucheb. zav.; khim. i khim. tekhn. 4 no. 2:324-326 '61.
(MIRA 14:5)

1. Saratovskiy pedagogicheskiy institut. Kafedra khimii.
(Borneol)

MYSOVSKIKH, G.

USSR/Mathematics - Elliptical equations

Card 1/1 Pub. 22 - 3/47

Authors : Mysovskikh, G.

Title : Application of Chaplygin's method for the solution of Dirichlet's problem
in the case of one particular type of elliptical equations

Periodical : Dok. AN SSSR 99/1, 13-15, Nov 1, 1954

Abstract : The existence of a solution of Dirichlet's problem, in the case of the
elliptical type equation $\Delta u = f(x, y, u)$, is proved through the application
of Chaplygin's method. Two references (1950 and 1954).

Institution : Leningrad State University im. A. A. Zhdanov

Presented by : Academician V. I. Smirnov, June 8, 1954

MYSOVSKIKH, I. P. K.

30144

Voprosu o skhodimosti myetoda n'yutona. Trudy matyem. ih-ta im. styelova,
T. XXVIII, 1949, C. 33-72

SO: LETOPIS' NO. 34

Mysovskih, I.P.

Mysovskih, I.P. - On the convergence of Newton's method.
Izv. Akad. Nauk, Steklov. 28, 145-147 (1949). (Russian)

The author proves a theorem similar to the one stated in
the preceding review. The inverse of $P'(x)$ is assumed to
exist and to be of uniformly bounded norm for all points x
of a specified sphere about x_0 , rather than just for x_0 . This
allows a larger bound for the quantity corresponding to h_0
and a very short proof.

J. V. Wehausen.

SOURCE: Mathematical Reviews,

Vol. 12 No. 6.

(Saw) 239

N. Myrovskii, S. P. On the convergence of functional equations and its applications. Doklady Akad. Nauk SSSR (N.S.) 70, 555-568 (1950). (Russian)

The author supplements results of Kantorovic on the functional equation (1) $P(x) = 0$ [Same Doklady (N.S.) 59, 1237-1240 (1948); Uspehi Matem. Nauk (N.S.) 3, no. 6(28), 39-435 (1948); these Rev. 9, 537; 10, 380], where the operator $P(x)$ has the properties assumed by Kantorovic of transforming X into Y (both Banach spaces) and of being twice differentiable in the sense of Fréchet. The results, patterned after those of Kantorovic, concern the existence and the uniqueness of a solution of (1), using one or the other of the sequences of approximations (2) $x_{n+1} = x_n - [P'(x_n)]^{-1}P(x_n)$; (3) $x_{n+1} = x_n - [P'(x_n)]^{-1}P(x_n)$. [The numbering of equations is that used by the author.] Four theorems are stated (one of them proved) of a general nature, and two theorems on applications.

A typical general theorem (compare with the first Kantorovic theorem [these Rev. 9, 537]) is as follows. Suppose (i) $\|P'(x_0)\| \leq n$ for the initial approximation x_0 ; (ii) the inverse operator $P'(x) = [P'(x)]^{-1}$ exists at each point of the sphere (3) $|x - x_0| \leq \epsilon$; (iii) B_{in}^n (where $H(t) = \sum_{k=0}^{n-1} (t/2)^k$, $0 \leq t < 2$), and throughout (3), $\|P(x)\| \leq B$, with $\|P(x_0)\| \leq B$; (iv) $\|P''(x)\| \leq K$ in (3); (v) $n = BE/K > 2$. Then in the sphere (3) equation (1) has a solution x^* to which the approximating sequence (2) converges with a rapidity given by $\|x_n - x^*\| \leq E(n)B(n/2)^{n-1}$. Moreover, if in (3) the number 2 is replaced by a ($a \geq 1.13$), a root of $E(a) = 2$, then x^* is unique in the sphere $|x - x_0| < 2(B-a)^{1/a}$ and it is held in this sphere.

One application of the general theorems is to systems of n algebraic equations in n variables. The other deals with the integral equation (12) $x(s) = \int_0^1 K(s,t)f(t,x(t))dt$. Taking $X = Y$ as the space of continuous functions on $[0, 1]$, the following result is given. Suppose (i) the kernel $K(s,t)f_s(t, x_0(t))$, where the initial approximation $x_0(t)$ is continuous, has the resolvent $G(s,t)$ with $\max_{s,t} |f_s(t)| G(s,t) dt \leq B$; (ii) $\max_{s,t} |x_0(s) - f_0 K(s,t)f_s(t, x_0(t))| \leq n$; (iii) $K(s,t)$ is measurable on $[0, 1] \times [0, 1]$, continuous in s and satisfies the inequality $K^2(s,t) \leq K_1(s)$, where $K_1(t)$ is summable on $[0, 1]$; (iv) in the region G of points (t, x) for which $0 \leq t \leq s$, $|x - x_0(t)| \leq 2(B+1)n$, the function $f(t, x)$ is measurable, and f_s exists and its square does not exceed $D(t)$ in G , where $D(t)$ is summable on $[0, 1]$; (v) $\int_0^1 f_s(t, x_s(t)) dt \leq D$, where $f_s(t, x_0(t))$ are of class L_1 ; (vi) $(B+1)^2 K_1 \leq 1$, where $K = [\int_0^1 K_1(t) dt] \cdot [D(t) dt]$. Then equation (12) has a unique solution $x^*(s)$ in the sphere $\|x - x_0\| \leq 2(B+1)n$, and to it the sequence of approximations (2) converges.

I. M. Shiffer (State College, Pa.).

Source: Mathematical Reviews, 1950, Vol. 11, No. 8

MYSOVSKIKH, I. P.

PA 241T73

USSR/Mathematics - Convergence

Nov/Dec 52

"Convergence of Newton's Method for a Real Equation in the Case of Cauchy-Type Conditions," I. P. Mysovskikh, Leningrad

"Priklad Matemat i Mekhan" Vol 16, No 6, pp 756-759

Studies convergence of Newton's method for eq $P(x) \neq 0$, where $P(x)$ is a real twice differentiable function whose first derivative in absolute magnitude is defined below by a positive number in a certain interval. Submitted 18 Jun 52.

241T73

~~MYSOVSKIH, I.P.~~
MYSOVSKIH, I.P.

Glinskaya, N. N., and Mysovskih, I. P. On numerical solution of a boundary problem for a nonlinear ordinary differential equation. Vestnik Leningrad. Univ. 9 (1954), no. 8, 49-54. (Russian)

The authors explain how a differential equation $y'' = f(x, y)$ with the boundary conditions $y(0) = y(1) = 0$ can be solved by an analogue of Newton's method as elaborated by L. V. Kantorovich. Two theorems are presented without a proof: (a) on the existence of the solution of the problem; (b) estimation of the error of the approximation.

S. Kulik (Columbia, S.C.)

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P.E. 1/2/86

MYSOVSKIKH, I.-P.

Mysovskikh, I. P. On a boundary problem for the equation $\Delta u = k(x, y)u^3$. Doklady Akad. Nauk SSSR (N.S.) 94, 995-998 (1954). (Russian)

Let u be a function which satisfies the differential equation (1) $\Delta u = k(x, y)u^3$ in a bounded, simply connected domain D and such that (2) $u|_S = f(s)$ on the boundary S of D . Here $k(x, y) > 0$ and continuously differentiable in the closed domain D and $f(s) \geq 0$, continuous, and $f(s) \neq 0$ on S . The author introduces a function u , harmonic in D and such that $u|_S = f(s)$, for the purpose of changing the dependent variable through the substitution $v = u - u$. This gives the boundary-value problem (3) $\Delta v = k(x, y)(v + u)^3$, $v|_S = 0$, which is equivalent to the integral equation

$$(4) \quad v(x, y) + \int_D \int G(x, y; \xi, \eta) k(\xi, \eta) \\ \times [v(\xi, \eta) + u(\xi, \eta)]^3 d\xi d\eta = 0,$$

where G is a Green's function. This integral equation is solved by Newton's method starting with the initial approximation $v_0 = 0$. It is proved that the approximating sequence so defined converges to the solution of (4), which leads to a solution of the original boundary-value problem.

C. G. Maple (Ames, Iowa).

Mysovskih, I. P.

USSR.

Mysovskih, I. P. Application of Caglyan's method to the solution of the Dirichlet problem for a special type of elliptic differential equations. Doklady Akad. Nauk SSSR (N.S.) 99, 13-15 (1954). (Russian)

Consider the equation $\Delta u = f(x, y, u)$ in a bounded, simply-connected region D with sufficiently smooth boundary S . Suppose u vanishes on S . If $f_{xx} > 0$ and $f_{yy} \leq 0$ in and on the boundary of D , the author defines the sequence of functions u_n with $u_0 = 0$ satisfying

$\Delta(u_n - u_{n-1}) = f_n(x, y, u_{n-1})(u_n - u_{n-1}) + f(x, y, u_{n-1}) - \Delta u_{n-1}$,
and shows that $u_n \leq u_{n-1}$ and that $u_n \rightarrow u$. Moreover, if $f(x, y, V) - \Delta V \leq 0$, and V vanishes on S , then $u_n \geq V$.

A sequence of functions v_n with $v_n \geq v_{n-1}$ is defined by means of a somewhat more complicated recursion where

also $v_n \rightarrow u$. The case $f_{yy} \geq 0$ with no assumption on f_{yy} is also treated, but again the recursions are more complicated.

A. S. Householder (Oak Ridge, Tenn.).

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Lehigh State U.

MYSOVSKIKH, I.-P.

16
Mysovskikh, I. P., Proof of the existence of an eigenvalue
for a symmetric kernel, Uspehi Mat. Nauk (N.S.)

11 (1956), no. 2(68), 199-200. (Russian)

The author derives the theorem described in the title
of the paper from the fact that the Neumann series for
the resolvent kernel of the integral equation

$$\eta(s) = f(s) + \lambda \int_a^b K(s, t) \eta(t) dt$$

is convergent for all λ such that $|\lambda| < |\lambda_1|$, where λ_1 is the
absolute value of the smallest eigenvalue.

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Mysovskih, L. P. Estimation of error arising in the
solution of an integral equation by the method of
mechanical quadratures. Vestnik Leningrad. Univ. 11
(1956), no. 19, 66-72. (Russian)

The following process for finding an approximate so-
lution of an integral equation of the form

$$(1) \quad \varphi(s) = \lambda \int_a^b K(s, t)\varphi(t)dt + f(s)$$

equation (1) thus being replaced by

$$(2) \quad \tilde{\varphi}(s) = \lambda \sum_{k=1}^n A_k K(s, t_k) \tilde{\varphi}(t_k) + f(s).$$

The system of equations obtained by putting $s=t_i$
($1 \leq i \leq n$) in (2) is solved, and (2) then gives an approxi-
mation $\tilde{\varphi}(s)$ to the solution of (1). The author obtains an

Mysorek, I.P.

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1-FW

estimate of the error $\max|\varphi(s) - \psi(s)|$ of this solution in terms of the quadrature errors

$$\varphi(s) = \int_a^b K(s, t)f(t)dt - \sum_{k=1}^n A_k(s, t_k)f(t_k),$$

$$\epsilon(s, t) = \int_a^b K(s, t')K(t', t)dt' - \sum_{k=1}^n A_k K(s, t_k)K(t_k, t).$$

Two numerical examples are given to show that this estimate is reasonably close to the truth, and is better than that given by certain other methods. The author remarks that his method is applicable even when the kernel has discontinuous derivatives, a case that often arises in practice. F. Smithies (Cambridge, England). 3/2

MYSOVSKIKH, I.P.

AUTHOR: Mysovskikh, I.P. 20-1-11/54

TITLE: On the Calculation of the Eigenvalues of an Integral Equation by Means of the Traces of Iterated Kernels. (O vychislenii sobstvennykh znacheniy integral'nogo uravneniya pri pomoshchi sledov pvtornykh yader)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol.115, Nr 1, pp.45-48 (USSR)

ABSTRACT: $K(s,t)$ signifies here a real, symmetric and continuous kernel in the quadrate $a \leq s,t \leq b$. For simplicity's sake the kernel is considered as positive in the sense of integral equations. The traces of the iterated kernels are here designated by $k_j = \int_a^b K_j(s,s)ds$ ($j = 1, 2, \dots$). The author develops the analytical function $D(\lambda)/D'(\lambda)$ into a power series: $D(\lambda)/D'(\lambda) = a_0 + a_1\lambda + a_2\lambda^2 + \dots$, where $D(\lambda)$ means the denominator of the Fredholm kernel $K(s,t)$. For the root of the equation, $f(\lambda) = a_0 + a_1\lambda + a_2\lambda^2 + \dots = 0$ is found. The chief result consists of the fact that the coefficients a_k satisfy the inequation $a_k a_{k+2} - a_{k+1}^2 > 0 (k \geq 2)$. Especially when $k \geq 2$, the inequation $a_k > 0$ results from a_2 and a_3 . When the traces of the iterated kernels k_1, k_2, \dots, k_m are known, the coefficients a_1, a_2, \dots, a_m can be calculated with the aid of certain recurrence formulae given here. The case $m = 2$

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On the Calculation of the Eigenvalues of an Integral
Equation by Means of the Traces of Iterated Kernels. 20-1-11/54

is separately investigated. Finally the kernel
 $K(s,t) = \begin{cases} 10s(1-t) & 0 \leq s \leq t \leq 1 \\ 10t(1-s) & 0 \leq t \leq s \leq 1 \end{cases}$ is examined as example.
There is no figure.

ASSOCIATION: Leningrad State University imeni A.A.Zhdanov (Leningradskiy
gosudarstvennyy universitet imeni A.A.Zhdanova)
PRESENTED: January 21, 1957 by V.I.Smirnov, Academician
SUBMITTED: January 19, 1957
AVAILABLE: Library of Congress

Card 2/2

AUTHOR: Mysovskikh, I.P. (Leningrad)

SOV/39-46-1-4/6

TITLE: The Representation of the Resolvent of the Sum of two Kernels
(Predstavleniye rezol'venty summy dvukh yader)

PERIODICAL: Matematicheskiy sbornik, 1958, Vol 46, Nr 1, pp 77-90 (USSR)

ABSTRACT: Let the Fredholm equation

$$(1) \quad \varphi(s) = \lambda \int_a^b K(s,t) \varphi(t) dt + f(s)$$

be given, where $K(s,t)$ and $f(s)$ are complex-valued continuous functions in $a \leq s, t \leq b$ and $a \leq s \leq b$. If the equation

$$\tilde{\varphi}(s) = \lambda \int_a^b M(s,t) \tilde{\varphi}(s) dt + f(s)$$

is solved instead of (1), where M is a kernel in a certain sense near to K , the error results of $\varphi(s) - \tilde{\varphi}(s)$. The paper deals with the estimation of the absolute value of this error. The author obtains several estimations which are partially known (Kantorovich [Ref 1], Akbergenov [Ref 6]), and partially

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The Representation of the Resolvent of the Sum of
two Kernels

SOV/39-46-1-4/6

similar to those of Lonseth [Ref 5]. The method of the author,
however, differs from the methods of his predecessors. He
applies Fredholm's methods and obtains at first expressions
for the Fredholm numerator and for the resolvent of the sum of
two kernels. The rather complicated second formula then serves
for obtaining the estimations.
There are 6 references; 3 of which are Soviet, 1 American,
1 German, and 1 French.

SUBMITTED: March 25, 1957

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Mysakovskikh, I.P.

16(1) PHASE I BOOK EXPLOITATION SOV/2660

Vsesoyuznyy matematicheskiy s'ezd. 3rd, Moscow, 1956
 Trudy, t. 4. Matematicheskiye issledovaniya sektsionnykh dokladov. Doklady
 International'nykh ucheniyen (Transactions of the 3rd All-Union Mathematical Conference in Moscow). vol. 4: Summary of Sectional Reports.
 Reports of Pure Mathematics. Izdat. Nauk SSSR, 1959.
 247 p. 2,200 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Matematicheskii institut.

Rech. Ed.: G.M. Sheverchenko; Editorial Board: A.A. Abramov, V.G. Bobylev, A.M. Vasile'yev, B.V. Medvedev, A.D. Ryantsev, S.M. Riznitskiy (head, Ed.), A.I. Prostakov, Yu. V. Frolov, K.A. Ryzhikov, P.L. Ul'yanov, V.A. Uspenskiy, M.O. Chazayev, O. Ye. Shilov, and A.I. Shirshov.

PURPOSE: This book is intended for mathematicians and physicists.

GOVERNING: The book is Volume IV of the Transactions of the Third All-Union Mathematical Conference, held in June and July 1956. The

book is divided into two main parts. The first part contains summaries of the papers presented by Soviet scientists at the Conference that were not included in the first two volumes. The second part contains the text of reports submitted to the editor by non-Soviet scientists. In those cases when the non-Soviet scientist did not submit a copy of his paper to the editor, the title of the paper is cited and, if the paper was printed in a previous volume, reference is made to the appropriate volume. The papers, both Soviet and non-Soviet, cover various topics in number theory, algebra, differential and integral equations, function theory, functional analysis, probability theory, topology, mathematical problems of mechanics and physics, computational mathematics, mathematical logic and the foundations of mathematics, and the history of mathematics.

Lobachev, F.I. (Krasnodar). On the Generalisation of the theory of linear integral equations of M.N. Mamatov

Stepanov, V.A. (Leningrad). Certain formulas of the Peano-Holmboe method and their application to the problem on the evaluation of error of approximate methods of solution of integral equations

Yefimov, A.B. (Minsk). Teorii o'dobr' (Myskov), and A. Isaevich (Volgograd). Two modifications of the concept of a dynamic system on the plane

Rapinchuk, O.F. (Odessa). Asymptotic expansions of the solution of partial differential equations in powers of a small parameter at highest derivative

Bogoliubov, N.N. (Piver). Subtraction method for the solution of boundary-value and mixed problems

Bilibin, Ya. B. (Zhdanov). On integral equations with singular nonlinearities

CARD 8/34

16(1)

SOV/39-47-1-8 8

AUTHOR: Mysovskikh, I.P.

TITLE: Letter to the Editor (Pis'mo v redaktsiyu)

PERIODICAL: Matematicheskiy sbornik, 1959, Vol 47, Nr 1, p 143 (USSR)

ABSTRACT: This is a correction of several misprints in the paper of the author "Representation of the Resolvent of the Sum of Two Kernels" in Matematicheskiy sbornik 1958, Vol 46, pp 77-90 (USSR).

SUBMITTED: October 27, 1958

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USCOMM-DC-60,604

16(1)

AUTHOR: Mysovskikh, I.P.

SOV/39-48-2-2/3

TITLE: On the Estimation of Error of the Approximate Methods for
the Determination of the Eigenvalues of a Hermitean Kernel

PERIODICAL: Matematicheskiy sbornik, 1959, Vol 48, Nr 2, pp 137-148 (USSR)

ABSTRACT: The author gives a-posteriori estimations of the error appearing
in the approximate determination of the eigenvalues of a
Fredholm integral equation of second kind with a Hermitean
kernel. The author considers two approximate methods: 1) The
kernel $K(s,t)$ is replaced by a kernel $M(s,t)$ with known
eigenvalues, where the difference $N(s,t) = K(s,t) - M(s,t)$ is
small in a certain sense; 2) the integral term of the equation
is replaced by an approximating sum and thereby the problem is
reduced to the determination of the eigenvalues of a certain
matrix. The author shows that the error estimation for the case
1) results from a theorem of H.Weyl in which the eigenvalues of
two completely continuous adjoint operators in one Hilbert space
are compared with each other. In the second case the direct
application of this theorem is impossible since operators in

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On the Estimation of Error of the Approximate
Methods for the Determination of the Eigenvalues
of a Hermitean Kernel

SOV/39-48-2-2/9

different spaces have to be compared. The author applies an own
method used already in Ref 3 where the iterated kernel is
used and the theorem of Weyl is applied two times. 2 examples
are given.

There are 5 references, 3 of which are Soviet, 1 Hungarian,
and 1 American.

SUBMITTED: July 27, 1957

Card 2/2

1641 16.4500, 16.4600

AUTHOR: Mysovskikh, I.P. (Leningrad) 05709
TITLE: On the Error Estimation of Eigen Values Which are Calculated
by Replacing the Kernel by an Adjacent one SOV/39-49-3-5/7
PERIODICAL: Matematicheskiy sbornik, 1959, Vol 49, Nr 3, pp 331-340 (USSR)
ABSTRACT: The paper is a detailed representation of the second part of
the lecture given by the author in June 1956 on the Third
Mathematical All-Union Congress in Moscow. Let $K(s,t)$ and
 $M(s,t)$ be continuous complex-valued kernels in $a \leq s, t \leq b$.
Assume that the difference $K(s,t) - M(s,t)$ is sufficiently
small and that the eigen values of $M(s,t)$ can be easily de-
termined. An a posteriori estimation of the deviation of the
eigen values of $M(s,t)$ from the eigen values of $K(s,t)$ is
given. It is an a posteriori estimation because it contains
the eigen values of $M(s,t)$. The author supposes : 1.) not
only the eigen values of $M(s,t)$ but also the Fredholm de-
nominator $D_M(\lambda)$ are known. 2.) Only those eigen values of
 $M(s,t)$ are considered which are simple roots of $D_M(\lambda)$. The

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05709

SOV/39-49-3-5/7

On the Error Estimation of Eigen Values Which are Calculated by Replacing the Kernel by an Adjacent one

idea of the estimation of errors is as follows : Let μ be eigen value of $M(s,t)$, i.e. $D_M(\mu) = 0$. Then μ is an approxi-

mation of a root of

$$(1) \quad D_K(\lambda) = 0$$

since M and K are adjacent; then, however, it is according to A. Ostrowski [Ref 2] :

$$(3) \quad |\lambda - \mu| \leq \frac{1 - \sqrt{1 - 2h}}{h} \cdot \gamma$$

For the effective determination of h and γ the author uses a formula of Lalesco [Ref 3].

There are 4 non-Soviet references, 1 of which is French, 1 German, 1 Italian, and 1 Hungarian.

SUBMITTED: January 25, 1958

Card 2/2

MYSOVSKIKH, I.P.

Representation of the resolvent of the sum of two operations.
Vest. LGU 16 no.19:169-170 '61. (MIRA 14:10)
(Banach spaces) (Operators (Mathematics))

29004

S/020/61/140/004/003/023

C111/C444

16.4500

AUTHOR:

Mysovskikh, I. P.

TITLE:

Estimate of the error involved in the numerical solution of a linear integral equation

PERIODICAL:

Akademiya nauk SSSR. Doklady, v. 140, no. 4, 1961,
763 - 765TEXT:
order

Considered is a Fredholm integral equation of second

(1)

$$\varphi(s) = \lambda \int_a^b K(s,t) \varphi(t) dt + f(s),$$

where $f(s)$ is continuous in $a \leq s \leq b$ and $K(s,t)$ continuous in $a \leq s, t \leq b$.

Let $a \leq t_1 < t_2 < \dots < t_n \leq b$ and

$$\begin{array}{c|c} t_1 & \Phi_1 \\ t_2 & \Phi_2 \\ \vdots & \vdots \\ t_n & \Phi_n \end{array} \quad (2)$$

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Estimate of the error...

where

$B = 1 + |\lambda| \Gamma$
 and ε_1 is defined by (6). Then the estimation

$$\|\varphi - \bar{\Phi}\|_I \leq \frac{1+|\lambda|K_1B}{1-q} (|\lambda| \|\varepsilon_f\|_I + |\lambda|^2 B \|f\|_C \varepsilon + \|\rho\|_I). \quad (12)$$

Here the vector ρ is defined by

$\rho = (I - \lambda L)\bar{\Phi} - f,$
 where L is a matrix of n -th order, generated by the kernel $K(s, t)$
 and the formula (3)

$$L = (A_j K_{ij}), \quad K_{ij} = K(t_i, t_j). \quad (14)$$

A numerical example is given.
 The author mentions G. A. Domanovskiy.
 There is one Soviet-bloc reference.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet im. A. A.
 Zhdanova (Leningrad State University im. A. A. Zhdanov)

Card 4/4

37234
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 D407/D301

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AUTHOR:

Mysovskikh, I.P.

TITLE:

On the method of mechanical quadratures for solving
 integral equations

PERIODICAL: Leningrad. Universitet. Vestnik. Seriya matematiki,
 mekhaniki i astronomii, no. 7, 2, 1962, 78 - 88

TEXT: Fredholm's integral equation of the second kind

$$\varphi(s) = \lambda \int_a^b K(s, t)\varphi(t)dt + f(s) \quad (1)$$

is considered; the kernel K and the free term $f(s)$ are continuous
 in the square $a \leq s, t \leq b$, and in the interval $a \leq s \leq b$, respec-
 tively. The arbitrary quadratic form

$$\int_a^b F(t)dt = \sum_{j=1}^n A_j F(t_j) \quad (2)$$

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On the method of mechanical ...

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is introduced. On solving Eq. (1) by the method of mechanical quadratures (with the use for formula (2)), one obtains a linear algebraic system

$$(I - \lambda L)\tilde{\varphi} = f, \quad (3)$$

where L is a matrix of n -th order:

$$L = (A_j K_{ij}), \quad K_{ij} = K(t_i, t_j), \quad i, j = 1, 2, \dots, n, \quad (4)$$

f and $\tilde{\varphi}$ are vectors. The function

$$\varepsilon(s, t) = \int_a^b K(s, \tau)K(\tau, t)d\tau - \sum_{j=1}^n A_j K(s, t_j)K(t_j, t) \quad (5)$$

is of particular importance in the following. This function represents the closeness of approximation of the matrix L to the kernel K . The characteristic

$$\|\varepsilon\| = \max_{a < s < b} \int_a^b |\varepsilon(s, t)|dt \quad (6)$$

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On the method of mechanical ...

of the function $\varepsilon(s, t)$ represents the norm, in space C , of the linear integral operator, defined by the kernel $\varepsilon(s, t)$. Two theorems are proved. Theorem I gives the estimate of the norm (in C) of the resolvent of the kernel $K(s, t)$, provided the estimate of the first norm of the matrix $(I - \lambda L)^{-1}$ is known. Theorem II gives the estimate of the first norm of the matrix $(I - \lambda L)^{-1}$, provided the estimate of the norm (in C) of the resolvent of the kernel $K(s, t)$ is known. Further, the nonlinear integral equation

$$\varphi(s) = \int_a^b F(s, t, \varphi(t))dt + f(s) \quad (44)$$

is considered. In solving Eq. (44) by the method of mechanical quadratures (with the use of Eq. (2)), one sets up the nonlinear system

$$\xi_j - \sum_{j=1}^n A_j F(t_i, t_j, \xi_j) = f_i, \quad i = 1, 2, \dots, n, \quad (45)$$

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On the method of mechanical ...

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D407/D301

and its solution, the vector $\tilde{\varphi}$, is taken as an approximation to the vector φ , constructed from the solution $\varphi(s)$ of Eq. (44). A theorem is stated on the estimate of the error, arising in the solution of Eq. (44) by the method of mechanical quadratures. The theorem is a direct consequence of L.V. Kantorovich's theorem on the convergence of Newton's method for nonlinear integral equations of type (44). There are 7 Soviet-bloc references.

SUBMITTED: February 20, 1961

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43212
S/020/62/147/003/007/027
B112/B186

AUTHOR: Mysovskikh, I. P.

TITLE: Cubature formulas for computing integrals over a hypersphere

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 3, 1962, 552 - 555

TEXT: Cubature formulas of the form

$$\int_D f(x)dx \approx \sum_{j=1}^p \int_{S_j} p_j(x)f(x)dS_j \quad (2)$$

having the highest possible algebraic degree of accuracy are constructed.
D denotes the domain $x_1^2 + x_2^2 + \dots + x_n^2 \leq 1$. A formula

$$\int_D f(x)dx \approx \sum_{j=1}^p A_j \int_{S_j} f(x)dS_j \quad (3)$$

is constructed which is valid exactly if $f(x)$ is a polynomial of the degree
 $4p-1$. Another one,

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S/020/62/147/003/007/027
B112/B186

Cubature formulas for computing...

$$\int_D f(x)dx \approx Bf(c) + \sum_{j=1}^p B_j \sum_j f(x)ds_j, \quad (10)$$

will be valid exactly if $f(x)$ is a polynomial of the degree $4p+1$. By means of the formulas (3) and (10), cubature formulas of the form

$$\int_D f(x)dx \approx \sum_{j=1}^N C_j f(x^{(j)}) \quad (1)$$

are constructed.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet im. A. A. Zhdanova
(Leningrad State University imeni A. A. Zhdanov)

PRESENTED: June 2, 1962, by V. I. Smirnov, Academician

SUBMITTED: May 31, 1962

Card 2/2

L 18063-63 EWT(d)/FCC(w)/BDS AFFTC/IJP(C)
ACCESSION NR: AT3002553 S/2944/63/000/001/0003/0011

53

AUTHOR: My*sovskikh, I. P.

TITLE: Cubic formulas for the circle and sphere

SOURCE: Leningrad. Universitet. Kafedra vy*chislitel'noy matematiki i
Vy*chislitel'ny* tsentr. Metody* vy*chisleniy, no. 1, 1963, 3-11

TOPIC TAGS: quadrature formula , circle, sphere

ABSTRACT: Cubic formulas for approximate computation of the double integral of
the function $f(x, y)$ in the region D have form

$$\iint_D f(x, y) dx dy = \sum_{j=1}^n A_j f(x_j, y_j) \quad (1)$$

where $M_j = (x_j, y_j)$ is a point in D. However, in place of M_j the author takes the
curves C_j in D, and instead of the products $A_j f(M_j)$, the curvilinear integrals
along C_j

$$\int_{C_j} p_j(x, y) f(x, y) ds, \quad (2)$$

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